

What is claimed is:

1. A projection-type display apparatus comprising:

a light source;

5 a liquid crystal light valve for modulating light emitted from the light source by turning a light polarization plane of the light;

a projection lens for projecting the light modulated by the liquid crystal light valve onto a projection surface; and

10 a pivotable light polarizer arranged between the light source and the liquid crystal light valve.

2. A projection-type display apparatus as recited in claim 1, further comprising a polarization-conversion element arranged between the light source and the light polarizer, for emitting light after orientating the polarization plane of the light emitted from the light source into a single direction.

3. A projection-type display apparatus as recited in claim 2, further comprising:

20 a first lens array including a plurality of lenses, arranged between the light source and the polarization-conversion element, for splitting light emitted from the light source into a plurality of partial beams; and

a second lens array including a plurality of lenses, arranged between the first lens and the polarization-conversion element, for approximately condensing onto the polarization-conversion element the plurality of

partial beams split by the first lens array.

4. A projection-type display apparatus as recited in claim 2, further comprising:

5. a columnar light guide, arranged between the light source and the polarization-conversion element, having an incident end for receiving light emitted from the light source, and an emitting end for emitting the light as a planar light source; and

a lens system, arranged between the light guide and the polarization-
10 conversion element, for approximately condensing onto the polarization-conversion element light emitted from the emitting end of the light guide.

5. A projection-type display apparatus as recited in claim 2, wherein the light polarizer is arranged in the vicinity of the polarization-conversion
15 element.

6. A projection-type display apparatus as recited in claim 1, further comprising:

a color separator arranged between the light source and the liquid
20 crystal light valve, for trichromatically separating light from the light source into red, green and blue light; and

a color composition unit arranged between the liquid crystal light valve and the projection lens, for composing the three colors of light modulated by the liquid crystal light valve; wherein

25 the light polarizer is arranged between the color separator and the liquid

crystal light valve in a light path of at least one of the three colors of light emitted from the color separator.

7. A projection-type display apparatus as recited in claim 1, wherein the
5 light polarizer is a grid polarizer comprising a base material made of a dielectric in parallel-plate form, and a plurality of thin- linear elements arranged on the surface of the base material at a predetermined spacing from each other.

10 8. A projection-type display apparatus as recited in claim 1, further comprising:

a polarizer driving unit for driving the light polarizer;

an average-value detector for detecting from an input image signal, and
outputting to the polarizer driving unit, average luminance value in a
15 frame;

a peak-luminance detector for detecting from said input image signal,
and outputting to the polarizer driving unit, peak luminance value in said
frame;

a liquid crystal driving unit for driving the liquid crystal light valve;
20 and

a determination unit for determining from said average and said peak
luminance values frame-by-frame whether to alter luminance value, and
outputting the determination results to the liquid crystal driving unit;
wherein

25 the polarizer driving unit determines pivotal angle for and drives the light

polarizer based on said average and said peak luminance values, and the liquid crystal driving unit drives the liquid crystal light valve based on said determination results.